

Land. South Carolina has more than 30,000 square miles of it.

Water. South Carolina has about 29,898 miles of rivers; 366,576 acres of lakes; and 682 square miles of estuaries.

Coast. The South Carolina coast is 182 miles of wide, sandy beaches and 200,000 acres of salt water marsh.

Air. It totally surrounds the land, water and coast.

*South Carolina. It is a place that more
than 4 million people call “home.”*

Thomas Jefferson once said, “The earth belongs to each generation during its course, fully and in its own right. No generation can contract debts greater than may be paid during the course of its own existence.” Now, more than 200 years later, we heed this advice while rising to the challenge of preserving our air, land and water resources so that all of us may enjoy all South Carolina has to offer — today and tomorrow.



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Champions of the Environment



Champions of the Environment is a student recognition program that encourages environmental involvement and awareness. Nationally recognized for its innovative approach to environmental education, the program promotes hands-on learning by recognizing students working on exemplary environmental projects beyond the usual realm of the classroom. With scholarships and media coverage, Champions of the Environment encourages student initiative and self-esteem.

The program promotes environmental awareness, leadership, conservation, creativity and self-confidence through activities such as group projects, public speaking and environmental research. Champions of the Environment is jointly sponsored by DuPont, International Paper, WIS-TV and DHEC.

For more information:
Contact: Merritt Kearns
Telephone: (803) 898-4394
E-mail:
kearnsms@columb32.dhec.state.sc.us
Internet Address:
www.scdhec.net/champions



Center for Waste Minimization

The Center for Waste Minimization is a resource for industries and others in South Carolina to use in developing or expanding pollution prevention/waste minimization programs. Since its beginning in 1990, the center has been invited to perform waste assessments at more than 650 facilities.



The center has a supply of materials available for industries and others to use. *To Waste Or Not To Waste* is a nine-minute video in which an “old hand” explains to a “new hire” how the former company management disregarded waste and the cost to manage it, causing the company’s prices to rise, sales to fall, the lay-off of workers and the eventual sale of the company. The new management introduced a pollution prevention/waste minimization program and has been able to control costs, lower prices, win back customers and assure the company’s survival.

The center also offers a set of seven cartoon posters, each with a waste minimization message presented in an amusing but understandable manner.

For more information:

Contact: Bob Burgess

Telephone: (803) 896-8986

E-mail: burgessre@columb30.dhec.state.sc.us

Internet Address: www.scdhec.net/eqc

Coast

The Office of Ocean and Coastal Resource Management (OCRM) provides technical assistance and educational programs to professionals, educational groups and the general public.

Education Outreach

OCRM offers a speakers' bureau that can address issues ranging from beach erosion and dune protection to best management plans for coastal communities. Programs are available for K-12 classes, college classes, and professionals.

OCRM Publications

How to Build a Dune is a publication that looks at the importance of sand dunes to the coastal regions of South Carolina. The booklet also goes into detail about the type of vegetation that can be planted on the dunes.



South Carolina Public Beach Access Guide will inform you on the things you need to know to not only enjoy the coastline today, but also to make sure that the beauty of the coast remains intact for many generations to come.

OCRM Hurricane Tracking Chart is a hurricane map that allows people to plot the track of a hurricane.

Protecting Fish Habitat is a pamphlet that informs boaters what they can do to protect fish habitat.

The Importance of Estuarine Shallows details the marshlands and the habitat that depend on the area. The booklet covers everything from oyster reefs to intertidal marsh.

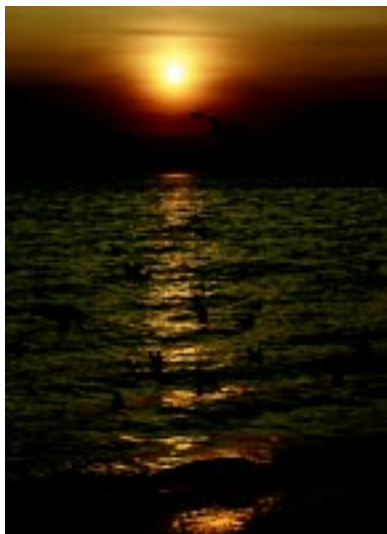
Colonial Waterbirds in the Charleston Harbor Estuary looks at the types of birds that call the Charleston Harbor “home.” It also goes into detail about the management needs of these birds and the threats these birds face.

Fred and Curtis *The Mystery of the Bottle* is a coloring book aimed at children from preschool to second grade. It teaches children that pollution on the land can cause pollution problems in the water.

Wetland Restoration is a booklet that informs the reader about the importance of wetlands and what needs to be done to protect them.

Vegetated Buffers and Buffer Ordinances is a booklet that focuses on the need for buffers around wetlands and how homeowners can build buffer areas.

Understanding Our Coastal Environment is a booklet that looks at the many types of environments along the South Carolina coast. The booklet details everything from the mud and sand flats, to beaches and Carolina Bays.



For more information:

Contact: Mike Robertson

Telephone: (843) 744-5838

E-mail: robertma@chastn86.dhec.state.sc.us

Internet Address: www.scdhec.net/eqc/ocrm



The Bureau of Land and Waste Management provides technical assistance and a variety of environmental education and outreach programs to students, teachers, community groups, businesses, local governments and the public. These programs are designed to promote an awareness and understanding of issues concerning South Carolina's precious land resources.

Speakers and programs are available on many issues, including infectious waste, mining and reclamation, hazardous waste, emergency response (for environmental spills), household hazardous materials, low-level radioactive waste and Brownfield cleanups (abandoned or underutilized property that has actual or perceived contamination and potential for redevelopment and reuse).

The Office of Solid Waste Reduction and Recycling serves as an outreach hub for the bureau. While the primary function of the office is centered on solid waste management, it can provide referral assistance in any of the topics mentioned above.

Looking for information on recycling? Buying recycled? Composting? Or how much garbage was generated in South Carolina this past year? The resource center, housed in the office, provides publications, brochures, videos, reports, posters and other materials to students, teachers and the public. Several highlight publications include: *The Glossary of Solid Waste and Energy Terms*, *The Science Fair Project Guidebook: A Resource for Students and Parents*, *South Carolina is Recycling! Activity Book* and *Home Composting Made Easy*.





The Resource Center offers many videos, including two that are South Carolina-specific. *Trashumentary* takes students on a field trip without leaving the classroom to visit a landfill, incinerator, composting facility and materials recovery facility. *Our World* introduces students in high school driver education classes to the importance of recycling used motor oil.

The office also offers the **Recycle Guys** public awareness television and radio outreach campaign to spread the word on recycling. In addition, the office provides grants to local governments, schools, colleges and universities targeting many solid waste management issues.

In partnership with the S.C. Energy Office, the office provides several energy education programs through the comprehensive **Energy 2 Learn** program, including the **Palmetto Energy Awards Program** and the **National Energy Education Development Project**.

For more information:

Contact: Richard Chesley

Telephone: 1(800)768-7348 or (803) 896-4209

E-mail: cheslerl@columb34.dhec.state.sc.us

Internet Address:

www.scdhec.net/recycle





Outreach Services

The Bureau of Air Quality (BAQ) offers outreach services to community organizations, civic groups, teachers, students and the general public. Staff are available to provide presentations on various air quality issues. Educational materials for teachers and students are available free of charge. Many of the fact sheets, regulations and other materials may be downloaded from the BAQ main Web page at www.scdhec.net/baq/. The Web page also contains information on BAQ activities and links to other helpful air quality and environmental Web sites.

Community Outreach

Many resources are offered to the public including ozone forecasts, expert speakers, telecourses, and forums for public comment on upcoming regulations. Some topics covered by these resources include acid rain, mobile source emissions, and ozone awareness.

Industry Outreach

Workshops and telecourses are also offered to inform industries of new standards and to provide guidance on new or modified regulations. Guidance documents and various forms may be found on the BAQ Web site.

Educational Outreach

Air Quality education is offered for students of all ages. Our outreach coordinators are available to provide presentations, consult with teachers for program development and lesson planning, as well as speak on careers in the environmental field. Lessons on air quality are available for K-12 in the S.C. environmental curriculum, Action for a Cleaner Tomorrow. For more information on the curriculum, see the “Action” tab in this booklet. Several air quality lessons, activity and fact sheets, and coloring pages may be found on the BAQ Web page.



Spare the Air

Spare the Air is a campaign initiated by a partnership between the Bureau of Air Quality, industry and environmental groups. The campaign is based on a voluntary ozone action program that has several components. The most important of these components is a public information campaign to encourage individuals to voluntarily take action to reduce air pollution and to protect themselves on high ozone days. For more information on **Spare the Air** and the ozone forecast, please visit the Bureau of Air Quality Web page.

For more information:

Contact: Beth Boland

Telephone: (803) 898-4382

E-mail: bolandel@columb31.dhec.state.sc.us

Internet Address: www.scdhec.net/baq



Mr. Ozone



"The Twins"
Sulfur Dioxide &
Nitrogen Oxide

Water

The Bureau of Water provides technical assistance and a variety of outreach programs to the regulated community, water professionals and the public. These programs have been designed to promote education and understanding of issues concerning South Carolina's precious water resources. The programs fall into three basic areas of education: learning about the environment; taking responsibility for protecting and enhancing the environment; and award and recognition for improving South Carolina's environment.

Nonpoint Source Pollution Education

The nonpoint source education program provides information and resources on nonpoint source water pollution issues. Nonpoint source water pollution is polluted runoff water. It occurs when rainfall or irrigation water picks up contaminants as it flows over the ground and deposits them in surface or groundwaters. Publications, educational resources, presentations and demonstrations using an interactive watershed model are available. A quarterly newsletter, *Turning the Tide*, focuses on current nonpoint source programs and issues and is available for professionals and the public.

For more information:

Contact: Anne Marie Johnson

Telephone: (803) 898-4187

E-mail: johnsoam@columb32.dhec.state.sc.us

Internet Address: www.scdhec.net/water/html/npspage.html

Wetlands Education

Wetlands make up about 23.4 percent of the state's land surface. In addition to being the most productive ecosystem on the North American continent, wetlands have multiple and diverse functions. These functions include improving water quality, providing flood protection, recharging groundwater, providing recreational opportunities and serving as valuable wildlife habitat. The growing awareness of the importance and value of this natural resource has led to legislative protection and restoration proposals across the country.



We have to find a balance between “using and abusing” wetlands. Representatives will be glad to give presentations about wetlands to any age group. Wetlands packets containing many fact sheets and brochures are also available.

For more information:

Contact: Quinton Epps

Telephone: (803) 898-4249

E-mail: eppsby@columb32.dhec.state.sc.us

Internet Address: www.scdhec.net/water

Drinking Water Education

The [Drinking Water Education Program](#) provides the public and drinking water professionals in South Carolina with information and technical assistance concerning drinking water issues. Available programs include school presentations, presentations for community groups and a variety of free literature.

For more information:

Contact: Stephan Bullock

Telephone: (803) 898-4180

E-mail: bullocks@columb32.dhec.state.sc.us

Internet Address: www.scdhec.net/water



South Carolina Water Watch

South Carolina [Water Watch](#) is a unique effort to involve the public and local communities in water quality protection. The [Water Watch](#) program was developed to encourage South Carolina's citizens to become stewards of the state's lakes, rivers, streams, estuaries and wetlands. Volunteers select a water resource on which to focus and perform one or more activities aimed at protecting water quality. Activities include conducting shoreline surveys, litter cleanups, storm drain stenciling, macroinvertebrate surveys and many more. Individuals and groups of all ages are encouraged to participate.

For more information:

Contact: Kim Gundler

Telephone: (803) 898-4211

E-mail: gundlekm@columb32.dhec.state.sc.us

Internet Address: www.scdhec.net/water/html/wtrwatch.html

Action for a cleaner tomorrow:

A South Carolina Environmental Curriculum Supplement

Action is an activity-based, interdisciplinary K-12 curriculum supplement that can serve as a starting place for incorporating basic environmental education in the classroom. More than 14,000 teachers have been trained to use the curriculum supplement since its introduction in 1994. Whether you are teaching students about recycling, energy conservation, the water table or air quality in South Carolina, these lessons are hands-on activities that help students get the facts, think for themselves, form opinions, make decisions and take action for a cleaner tomorrow.

“Action is designed to give students the knowledge, information, and skills to make responsible decisions on environmental issues.”

Lorraine Conrad,
Science Coordinator, Richland School District 2

“Action brings environmental issues home with its South Carolina-specific perspectives. Teachers can use Action to help meet the South Carolina curriculum standards for science.”

Linda Sinclair,
*State Science Coordinator
S.C. Department of Education*

Lesson Highlights

Below are descriptions of lessons from each of the four main subject areas of *Action*: air, energy, solid waste and water.

AIR: Become more air aware. *Action* contains lessons dealing with today's most important air quality issues. “The Ozone or No Zone” and “Living in the Greenhouse” lessons teach students the difference between “good” and “bad” ozone. Increase their knowledge of how weather patterns influence air quality with “Today's Forecast.” Or come inside with “The Air in Here” and bring to light indoor air quality issues. These fun and informative lessons will get students interested in learning more about what they can do for cleaner air.

ENERGY: Students can learn all about energy and how important it is in “Living Without Power” and “Conserving Energy.” How about a little geography mixed with energy? Students can learn where South Carolina gets its energy in “Power to Do Things.”

It's time for a science experiment with “Energy From the Sun.” Students learn how to measure solar heat and figure out ways this energy might be used to reduce our dependence on traditional fossil fuels and nuclear power.

The **Palmetto Energy Awards Program (PEAP)** is a special program for students (K-6) who want to learn more about energy. By completing energy projects, students earn points toward achieving different awards, including bookmarks, certificates and T-shirts. **PEAP** is sponsored by the S.C. Energy Office and DHEC's Office of Solid Waste Reduction and Recycling.

SOLID WASTE: These lessons will help students learn how much garbage we make and ways to manage it, including recycling, waste reduction, buying recycled and composting. "Plastics by the Number" will help students recognize the role of plastics in our society, understand the plastics coding system and learn about surprising products made out of recycled plastics. "Musical Resources" helps your students learn about natural resources and how they are used in the things we buy and use each day.

Take a different look at the past in "The History of Garbage." Students see what happens when they throw things away in "A Trip to the Landfill." Do you own a bike? Did you know hazardous materials are made during the bike's construction? The students will understand that everyone is responsible for making waste in "Bikes and By-Products."

WATER: "Runaway With Runoff" helps students understand how everyday activities on the land can affect our water quality. By using the lessons "We All Live Downstream" and "Runaway Water," classes will learn through hands-on activities about runoff pollution, watersheds and land use.

Practice geography and learn about drinking water sources with "South Carolina's Bodies of Water." Bring the water cycle to life with "The Water Cycle" and "The Mini Water Cycle" and add to students' knowledge about states of matter with "Evaporation." All of these lessons use simple materials to have fun while practicing important science concepts.

Action Workshops

DHEC's Office of Solid Waste Reduction and Recycling manages **Action** for a cleaner tomorrow and **Action** workshops. In a three-hour workshop, you'll learn how the curriculum supplement works. Each teacher completing the workshop receives a copy of **Action** (either a K-8 or 6-12) in a three-ring binder or a CD-ROM. **Action** and **Action** workshops are provided by DHEC at no cost to schools or teachers. For more information about **Action** or setting up a workshop:

Contact: Richard Chesley
Telephone: (803) 896-4209
E-mail: chesler1@columb34.dhec.state.sc.us
Internet Address: www.scdhec.net/recycle

